

RECEIVED  
CENTRAL FAX CENTER

OCT 16 2006

Application No.: 10/771863

Case No.: 59472US002

REMARKS

Claims 1 to 31 are pending. Claims 16 to 28 and 31 have been canceled. Claims 1 and 6 are amended to better clarify the claimed invention. Claims 1 to 15, 29 and 30 are pending.

§ 103 Rejections

Currently pending claims 1 to 15, 29 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kusano et al. (U.S. Patent No. 6,386,710) in view of Schrenk et al. (U.S. Patent No. 5,872,653) and Katsumata et al. (U.S. Patent No. 6,829,090). Applicant respectfully traverses this rejection.

The June 6, 2006 office action stated on page 6:

"Katsumata teaches in column 4 lines 1-14 that by using pressure sensitive adhesive (*Soft type adhesive*) it is possible to suppress internal stress and optical distortion which when present in prior art beam splitters would degrade the quality of the projected image. Accordingly it would have been obvious to one of ordinary skill in the art to use pressure sensitive adhesive as taught by Katsumata to attach at least one of the covers of Kusano since it is desirable to reduce optical distortion in a polarization beam splitter (*emphasis added*)."

The text from Katsumata that seems to be most relevant in the section referred to by the office action is column 4, lines 8 through 14:

"Since the *soft type adhesive* is provided between the grid substrate and the prism substrates, it is possible to suppress the internal stress and optical distortion. Additionally, since the prism substrates are comprised of flat plate shaped members optically combined with interposition of a *soft type adhesives* [sic], it is possible to further reduce internal stress and optical distortion (*emphasis added*)."

Application No.: 10/771863

Case No.: 59472US002

It is unclear to Applicant why the office action substitutes the words "pressure sensitive adhesive" as an equivalent to a "soft type adhesive." It is not the case that all soft type adhesives are pressure sensitive adhesives, just as it is not the case that all "adhesives" are "pressure sensitive adhesives." This is made clear from the Katsumata disclosure itself in column 6, lines 22-27, which states:

"The adhesive layer 23 is a soft type adhesive and may, for example, be a UV adhesive exhibiting rubber-like performance or a silicon adhesive exhibiting rubber-like performance. The adhesive layers 23 are provided on the surfaces of the diffraction grid substrates 22 facing the diffraction grid 21 of the diffraction grid substrates 22."

As is clear from Katsumata itself, a soft type adhesive is not per se a pressure sensitive adhesive. In fact, the examples of "soft type" adhesives given in Katsumata are NOT pressure sensitive adhesives. Instead, the examples given are a UV adhesive and silicone adhesives. By their nature, both of these are adhesives which are "cured."

Further, the 6/30/06 office action refers to this same section of Katsumata to reject the "structural adhesive" of claim 3. The office action states on page 4:

"Katsumata in column 6 lines 21-27 also describes a UV adhesive, which would be a structural adhesive and both prism [sic] would obviously be adhered to the polarizing film in between or else the prism [sic] would fall apart."

Thus, the office action uses the *same* UV or silicone "soft adhesive" of Katsumata to reject both the pressure sensitive adhesive described in claim 1, as well as the "structural" adhesive of claim 3. This is improper. The use of "structural adhesives" is described, for example, at page 6, lines 6-9 of the current application:

"Structural adhesives can shrink during curing and/or cure unevenly, causing stress on the MOF and/or the rigid substrate. It is also possible that not fully cured structured adhesive undergoes gradual curing by light and

Application No.: 10/771863

Case No.: 59472US002

heat under the normal usage condition, which can decrease the stability of the PBS.”

The pressure sensitive adhesive of claim 1 is not anticipated by structural adhesives, as is suggested by the characterization in the office action of the “soft” UV adhesive of Katsumata as a structural adhesive. Additionally, the pressure sensitive adhesive of claim 1 does not refer to adhesives that require activation by an energy source (such as UV adhesives). The adhesive required by claim 1 is not disclosed by Katsumata, and in fact the examples provided by Katsumata specifically teach away from the adhesives of the current invention.

Per MPEP § 2143, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Since all of the limitations of independent claims 1 and 8 have not been disclosed, The rejection of independent claims 1 and 8 under 35 USC § 103(a) as being unpatentable over Kusano et al. (U.S. Patent No. 6,386,710) in view of Schrenk et al. (U.S. Patent No. 5,872,653) and Katsumata et al. (U.S. Patent No. 6,829,090) is improper and should be withdrawn. Reconsideration, allowance, and notice to that effect are respectfully requested.

Claims 2-7 and 29 each add additional features to claim 1. Claim 1 is patentable for the reasons given above. Thus, claims 2-7 and 29 are likewise be patentable. While applicant does not agree to the additional rejections of claims 2-7 and 29, any additional rejections are moot.

Claims 9-15 and 30 each add additional features to claim 1. Claim 1 is patentable for the reasons given above. Thus, claims 9-15 and 30 are likewise be patentable. While applicant does not agree to the additional rejections of claims 9-15 and 30, any additional rejections are moot.

The rejection of claims 1-15, 29 and 30 has been overcome and should be withdrawn. Reconsideration, allowance, and notice to that effect are respectfully requested.

Application No.: 10/771863

Case No.: 59472US002

Should the Examiner feel a telephone interview would be helpful in advancing this case to allowance, Applicant invites the Examiner to contact their representative at the number listed below.

Date

10/16/06

Respectfully submitted,

By:

George W. Jonas, Reg. No.: 46,811

Telephone No.: 651-736-6933

Office of Intellectual Property Counsel  
3M Innovative Properties Company  
Facsimile No.: 651-736-3833